WHAT IS CLAIMED IS:

- 1. A method of manufacturing a Ti-Ni-based shape-memory alloy having a titanium content within a range of from 50 to 66 atomic %, which comprises the step of forming and distributing a nanometer-scale precipitate generating a coherent elastic strain in a mother phase through a heat treatment of an amorphous Ti-Ni-based alloy at a temperature within a range of from 600 to 800 K.
- 2. The manufacturing method as claimed in claim 1, wherein said heat treatment is carried out in a single run.
- 3. The manufacturing method as claimed in claim 1, wherein said alloy is in a thin film shape.
- 4. The manufacturing method as claimed in claim 2, wherein said alloy is in a thin film shape.